

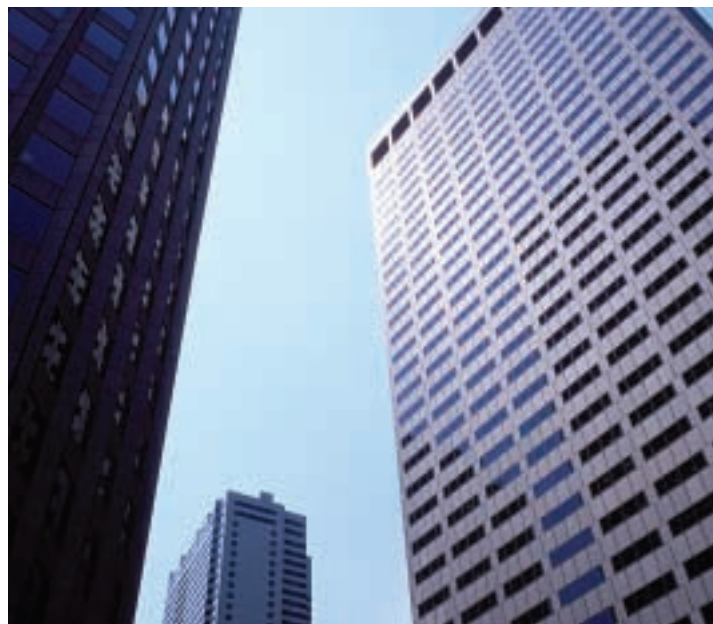
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Education » Technology » Fast Forward

**NEW**  
CHALLENGES —  
**NEW**  
OPPORTUNITIES





**Editor's Note:** Our October 1998 and December 2000 issues featured Boston Mayor Thomas Menino's strong leadership in organizing a team of dedicated individuals to connect the city's public schools to the potential generated by technology. Six years after the launch of the project, pilot studies have evolved to fully functioning programs now in place. Through the city's Digital Bridge partnership, Boston schools are an excellent example of successful collaboration and partnerships, even connecting families and neighborhoods along the way.

Here we further examine Boston's progress and vision for the future, and some of the people making a positive impact.

# GOING TO SCALE WITH **BOSTON'S** REVOLUTION





**1** BOTTOM ROW, L-R: 1. Darlene Harrison, TGH Graduate 2. Michael Contompasis, Chief Operating Officer, Boston Public Schools 3. Mayor Thomas M. Menino, City of Boston 4. Travis Singleton, TGH Graduate 5. Velda Singleton, TGH Graduate TOP ROW, L-R: 6. Nyvia Colon, TGH Coordinator, Lower Roxbury 7. Josefina Bonilla-Ruiz, TGH Project Manager 8. Antonelly Diaz, TechBoston Student 9. Ann Grady, Director, Office of Instructional Technology, Boston Public Schools 10. John Greeley, TechBoston

**2** BOTTOM ROW, L-R: 1. Steve Gag, Chief Operating Officer, Boston Digital Bridge Foundation 2. Rachel Gogos, Director of Strategic Initiatives & Communications, Boston Digital Bridge Foundation 3. Evangelene Lacombe, TGH Graduate 4. Mayor Thomas M. Menino, City of Boston 5. Rashid Lacombe, TGH Graduate 6. Helen Chan, TechBoston Student 7. Karen Popplewell, Director of Community Relations & Partnerships, Boston Digital Bridge Foundation 8. Michelle Santos, TGH Graduate, Boston Digital Bridge Foundation - Office Manager TOP ROW, L-R: 9. Edward DeMore, CEO, Boston Digital Bridge Foundation 10. Mary Skipper, CEO, TechBoston Academy 11. Oren Kennedy, TechBoston Student 12. Adreenne Law-Hampton, TGH Coordinator, Grove Hall 13. Amie Capodanno, Private Industry Council 14. Alvin Cooper, Communications & Events Manager, TechBoston 15. Bao Lai, TechBoston student

In the years that followed, these projects have gained mass and gathered momentum. What once appeared to be a wall of indifference has turned into a landslide of encouragement and support that is reaching into the rich diversity of Boston's ethnic neighborhoods and extending to the loftiest reaches of corporate America and academia.

Boston is now taking its most successful pilot projects to scale, building outward from its schools and inward to homes and communities. Students are finding new reasons to stay in school. Teachers are finding new enthusiasm for their chosen profession. Families and neighborhoods are finding new bonds of connection and communication. Businesses are discovering new sources of homegrown talent and technical expertise. In short, everyone is benefiting from this peaceful revolution that is being scaled up to create a culture of technology and learning.

#### INFUSING TECHNOLOGY INTO THE SCHOOLS

"Our goal six years ago was not simply to create a few more good schools," said Tom Payzant, superintendent of Boston Public Schools (BPS). "We were committed to improving all schools and providing all our students with access to opportunity. We have successfully completed our first five-year plan, and are now well into the first year of our next five-year plan, which we call LINC 2 the Future. Our intention is to focus on doing certain things deeply and well, and to have the coherence and continuity to ensure follow-through and results."

Mayor Menino rallied the business community around the concept of school reform built on technology. Persuaded that they were acting in their own best interests, companies stepped up to the challenge and helped put infrastructure, equipment and software in place. As a result, Boston has made continuous progress beyond its initial success of starter networks in every school and now has Internet access in every classroom and a highly respectable ratio of one computer for every five students. Ninety percent of Boston Public School teachers have received at least 50 hours of professional development and are now using computers in their classrooms.

**A** REVOLUTION IS TAKING PLACE IN BOSTON. There is no tea in the harbor this time around, no shots ringing out at the bridge in Concord. This is a quiet revolution, fueled by political activism, grassroots community involvement, and a confederation of pragmatic visionaries. Boston, once the virtual poster city for the Digital Divide, has become a model of technological inclusion — in its schools, neighborhoods and homes.

In 1996, Boston's new mayor, Thomas Menino, issued a call to action to build a digital bridge that would interconnect all the city's stakeholders. His demand for far-reaching changes shook the underpinnings of Boston's aging educational infrastructure — a seismic tremor that unloosed a flurry of pilot projects designed to place technology at the epicenter of citywide school reform.



"Our intention is to focus on doing certain things deeply and well, and to have the coherence and continuity to ensure follow-through and results." **Tom Payzant**

The focus of Boston's technological advance over the next few years will be integrating technology into the curriculum; building a technical support system throughout the district; and creating an intranet portal, MyBPS, that links teachers, students, administrators, parents and communities.

"MyBPS will ensure that every person in the Boston Public School community will have access to the information and tools they need to fulfill their mission," explained Ann Grady, director of the BPS Office of Instructional Technology. "Parents and teachers will have a new communication link through MyBPS, which will make it easier for parents to be aware and involved. School principals will have a new tool to develop comparative information that can lead to a deeper understanding of what works and what doesn't. Teachers will have new ways to enrich the classroom learning experience and learn from their peers."

When MyBPS is completed, it will serve a community of over 110,000 people, including 63,000 students, as well as parents, teachers and administrators. In addition, this powerful educational portal will be a crucial part of expanding two other major Boston initiatives, TechBoston and Technology Goes Home, both of which are designed to foster access to and the use of technology in homes and neighborhoods throughout the city.

## **BUILDING TECHNICAL SUPPORT FROM THE INSIDE**

The TechBoston program began with the recognition that technology build-out in the schools and communities would require a growing cadre of technical support personnel. "We sent out a memo to all schools to find out if some students were interested in taking after-school courses that could lead to professional certification," explained TechBoston director, Mary Skipper. "We found very quickly that for every 25 seats we could offer in an after-school class, we had 100 applicants."

Just three years later, the TechBoston pilot program has been expanded to all of the district's high schools, and seven middle schools. Too large to be contained in an after-school program, TechBoston is offered as a class during the regular instruction day, and 2,500 students are taking advantage of the growing number of professional certification programs.

"The stereotype of a large, inner-city school district is anything but nimble and entrepreneurial," said Payzant. "TechBoston is a stereotype-killer."

Taking TechBoston to scale was just the beginning. In fall 2002, TechBoston Academy will open its doors to 75 incoming freshmen, selected by lottery, who will attend Boston's newest high school. Funded by the Bill



### **Darlene Harrison: Technology Makes a Difference at Home**

Darlene Harrison is the mother of six daughters. She was working in a shelter for homeless women when she learned about Technology Goes Home. "I didn't know anything about computers," she said. "I was scared of computers."

She quickly overcame her fears, as she enrolled with her 13-year-old daughter in the 10-week program at Boston's Upham Corners Community Development Center. "I met other families," Harrison said, "and we had a chance to get to know each other. I developed a new bond with my daughter. We both loved the program."

Harrison continues to work at the homeless shelter on weekends, and she is now employed at a local hospital. She recently earned her high-school diploma and is applying to college. She hopes to win a scholarship and study human services. "I want to work with people. They helped me, now I want to give back."

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### **Nyvia Colon: Technology Makes a Difference in the Neighborhood**

Nyvia Colon wanted to make a difference in her lower Roxbury neighborhood, and Technology Goes Home gave her the opportunity she was looking for. "In the past year, we have graduated 45 families," she said proudly. "Of those, 18 of the adults have been able to move up to better-paying jobs."

Colon doesn't just concentrate on the hard skills of computer operation. She also teaches, by word and by example, the importance of soft skills — making a good impression, being courteous and displaying confidence. "I work with my heart and with my passion," she said.

She is a gifted and creative teacher who enables the adults and children in her classes to discover the values of sharing, of setting goals, and of dreaming big. She helps people organize, acquire skills and learn — using the computer as a tool for building confidence and self-esteem.

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"Technology Goes Home is proving to be a tremendous tool for community building and for expanding learning beyond the schools and into the homes and neighborhoods." **Edward DeMore**

#### related converge articles

Dec. '00,  
"Building the Digital Bridge in Boston"

Oct. '98,  
"Mayor's Leadership: Technology with People Power," "Mayor Thomas M. Menino: Not Afraid to Get Involved"

& Melinda Gates Foundation and the Boston Foundation, this new school will grow by 75 students per year to its eventual size of 300. It will be a year-round school with extended hours. All students will have laptops, and all classes will use technology in learning math, science, humanities, languages, art and music.

Built into the concept are mechanisms for spinning out best practices into the district as a whole and providing additional technology impetus to all aspects of teaching and learning. TechBoston Academy will be an incubator for innovation and a hub of technology development that will benefit every school in the city.

#### TAKING TECHNOLOGY INTO THE NEIGHBORHOODS

The infusion of technology into the schools is being supported with an innovative and crucial program designed to bridge the Digital Divide in the home. Technology Goes Home is a unique partnership of community agencies, businesses and neighborhoods themselves. The intent is to provide low-income families with computers and instruction in computer usage.

An adult and a child sign up for a 10-week program of instruction in the use of a computer. Upon successful completion of the program, the family receives a

computer to take home. Sixty community-based organizations in six Boston neighborhoods worked together to select, train and support families. More than 500 families have received training so far.

The early results are nothing short of astounding. Between 35 and 70 percent of adult graduates report that they have either gone on to better-paying jobs or received pay increases in their present jobs. An overwhelming majority of students are getting better grades in school. And families consistently report that new bonds of communication have been established as a result of this joint learning experience.

Technology Goes Home is producing results beyond expectations. "It's not just about learning computers," said Edward DeMore, CEO of the Boston Digital Bridge Foundation. "It's proving to be a tremendous tool for community-building and for expanding learning beyond the schools and into the homes and neighborhoods."

"We went rapidly to scale with infrastructure and TechBoston," said Menino. "Now we are taking Technology Goes Home to scale by making it available to every Boston family."

#### A MODEL WORTHY OF EMULATION

School districts throughout the nation are scrambling to improve access to technology, to discover what works to improve learning — and what doesn't. Two things distinguish the efforts in Boston: one is the breadth of programs that are in place; the other is the speed with which these initiatives have gone from pilot studies to full-scale, operational programs.

Boston's tech team has found ways to generate cooperation among disparate groups, to cross boundaries in interesting ways, and to enlist the support of all stakeholders. In doing so, it is building a cost-effective and viable model that is worthy of attention and replication on a broader scale. Over two centuries ago, Boston set the tone for revolution. It may well be doing it again. ■

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**Tech Boston**  
<[www.techboston.org](http://www.techboston.org)>  
**Technology Goes Home**  
<[www.tghboston.org/index.html](http://www.tghboston.org/index.html)>



#### Linda Keller: Technology Makes a Difference in the Schools

Linda Keller is director for a project funded by the Bill & Melinda Gates Foundation, which is providing funding for TechBoston Academy. "The foundation is funding eight school districts in large urban areas where there is a high potential for using technology in creative ways to reduce dropout rates and improve teaching and learning. We chose Boston because there was such a strong support system in place, along with the enthusiastic support of both the mayor and superintendent of schools."

Keller expects that the TechBoston concept will have an important positive impact on high-school reform in general, not only in Boston but also as a replication model nationwide. "TechBoston Academy will be a hub school," she explained, "developing technology in ways that can benefit other schools, while exporting a culture and environment of personalized education and project-based experiences that build strong relations between students and adults."

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